

AGC/WSDOT Structures Team Minutes

October 22, 2004

Members in Attendance

Attendees:	Company	Phone	E-mail
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The meeting began at 9:00 AM. October 22, 04 meeting minutes were reviewed and approved without any changes.

Latest Updates to the Std. Specs.

Moh handed out the latest revisions to the standard specifications:

Section 6-02.3(19) Bridge Bearings

Deleted the requirement for gluing elastomeric pads to the piers and deleted the requirement to coat all sliding surfaces with oil or graphite.

Section 6-02.3(20) Grout for Anchor Bolts and Bridge Bearings

Grout pads may be loaded when a min. of 4000 psi compressive strength is achieved.

Section 6-02.3(21) Drainage of Box Girder Cells

Added all drainage holes shall be screened in accordance with the plan details.

Section 6-02.3(22) Drainage of Substructure

Added all weep holes shall be covered with a geotextile.

Section 6-02.3(17) O Early Concrete Test Cylinder Breaks

The word independent laboratory is deleted and replaced with testing labs with calibrated equipment and certified testers.

Section 6-02.3(2) Proportioning Materials

Revised the concrete proportions regarding ground blast furnace slag, fly ash, and micro silica.

Section 6-02.3(2) A Contractor Mix Design

Revised to include use of microsilica fume..

Section 6-02.3(5) C Conformance to Mix Design

Revised the tolerance on batch weights.

Section 6-02.3(24) C Placing and Fastening

Added rebar placing tolerances for shafts.

Section 6-03.3(33) Bolted Connections

Corrected a typo on Table 4 on turn of the nut method.

Section 6-05.3(9) A Pile Driving Equipment Approval

Updated some of the factors used in the wave equation analysis for pile driving, these changes are necessary because of the new LRFD design standards.

Action Item: The committee is to review these changes and get back to Moh with any comments; these revisions will be implemented in approx. one month unless there are feedbacks from the team.

The committee discussed self-compacting concrete briefly. Several committee members discussed the current state of the art and industry use of the product; at this time there will be no changes to the specs. concerning use of SCC for structural components.

New Vibration Limits Spec-Final Draft

Jim Schettler handed out a proposed new specification “6-02.3(11) B “Protection Against Vibration.” The committee discussed the proposed specification extensively, and how the monitoring was to be done, what the purpose of the specification was, etc. There was a concern expressed that the monitoring equipment was expensive to purchase. Ryan reported a rental cost and set up of approx. \$100 - \$500. Charlie mentioned that the purchase cost is approx. \$3K - \$5K.

At this time this issue is unresolved and will be further discussed at a later meeting.

Action Item: Scott and Charlie are going to do some field-testing of the vibrations caused by various construction equipment and bring the information back to the committee at the next meeting. The committee also thought that the chart shown in the handout should show strength of concrete vs. horizontal distance to protect the concrete from damage.

Dowel Embedment Length-discussion topic # 23

Jim Schettler has researched the preferred epoxy embedment length for #4, 5, and 6 bars and found that the embedment lengths are not much different than what is indicated in the BDM, but he is still researching the matter with regards to creep and dynamic loading characteristics of the anchors.

Action Item: Keep on the agenda for the next meeting, for a further report.

Development of Specifications for Electrical/Mechanical Contracts-Discussion Topic #23.

These contracts have been a problem for both the contractors and the State to administer; Moh asked the contractors how they thought these projects could be successfully built? Some brainstorming suggestions were: Prequalify the electrical/mechanical subcontractors and the systems integrator; get a separate class of contractor instead of class 6 to do the work; within the DOT more clearly define the roles and responsibilities of the bridge preservation office, maintenance, and the construction office with regards to who's in charge; contract plans are vague; who's going to decide issues on the contract the bridge preservation office or the construction office; who do you want to manage the overall contract a bridge contractor or an electrical/ mechanical contractor; break contracts into two parts, one contract electrical / mechanical and one contract bridge construction; do the contract as design build; the State wants the same electrical / mechanical components on all of their moveable bridges; State inspectors and field offices need to be onboard with what is necessary in the contract; what is bridge preservation's role in the contract.

Action Item: An on going agenda item that needs further discussion.

General Special Provisions and Bridge Special Provisions, Prioritization for Future Review

Action Item: Every member of the committee is going to come to the next meeting with 5 specific special provisions that the committee should look at in the future, any other new agenda items that a committee member wants included in the next meeting please email Moh.

10-Minute Break

Rapid Construction Presentation

Barry Brecto gave a power point presentation on his scanning tour last summer of Europe and Japan and discussed the rapid construction techniques practiced. The presentation focused on mostly construction methods using large transport trucks, cranes and barges to move previously constructed bridges and other facilities that were assembled off site and then moved to their final location. Get in and get out construction techniques was presented.

Next meeting is scheduled for November 9th; please bring your schedules to the next meeting, as the next 6 meeting dates will be selected.

The meeting adjourned at 11:40 AM.